



Edgewood Area - Aberdeen Proving Ground, Maryland 21010-5424

U.S. Army Soldier and Biological Chemical Command

Collective Protection Equipment M49 Fixed Installation Filter (FIF)

Description: The FIF is comprised of modular, stainless steel 600 cubic feet per minute (CFM) and 1200 CFM gas filters, which can be stacked in parallel for larger airflow capacities. Each gas filter contains refillable, 120 CFM gas filter trays (5 trays per 600 CFM filter; 10 trays per 1200 CFM filter). The FIF is a stainless steel gas filter containing ASZM Teda Carbon - a chrome-free, non-hazardous material.

Typical FIF systems operation consists of three stages: (1) a pre-filter to collect large particle size dust, (2) a high efficiency particulate air (HEPA) filter to collect sub-micron size particles, and (3) a gas filter to filter toxic vapors and gases. Though such systems are installed within the existing ventilation ducts, a separate blower system must be installed to accommodate the extra static head present in the collective protection filter system. The HEPA filter will protect against nuclear and biological particulate matter; the gas filter will protect against chemical agent vapors.



1200 CFM Gas Filter

Mission: The FIF is designed to provide a protective environment against nuclear, biological and chemical (NBC) warfare agents for chemical-hardened fixed shelters, office command control, and underground shelters during life support operations and other critical activities.

User: U.S. Army, U.S. Air Force, U.S. Army Corps of Engineers, U.S. Department of Energy, U.S. Federal Aviation Administration, Laboratories, and Special Operation sites.

Capabilities:

- Modular, refillable, reusable trays
- Interchangeable with the wooden military gas filter
- Removes and provides protection of any primary vapor agent or gas hazard
- Operates effectively between -25° F and +125° F
- Serviceable after 5 years of storage
- Stainless steel parts construction offers better resistance to weathering and chemical contamination

Program Goal: Replaces all of the fielded wooden FIF gas filters (5000 CFM, 2500 CFM, 1200 CFM, and 600 CFM). Improves reliability, logistical support, and the manufacturing process.

Status: Items are fielded and in production for several different users.

Major Accomplishments: Established reliable production process, improved logistics performance and reliability, simplified installation, maintenance, and long-term storage.



120 CFM Filter Tray



For additional information, please contact Director, Edgewood Chemical Biological Center, ATTN: AMSSB-REN-P, Aberdeen Proving Ground, MD 21010-5424. The System Manager can also be reached by telephone at (410) 436-5755 or DSN 584-5755, or by fax to (410) 436-5257.